



State of Utah

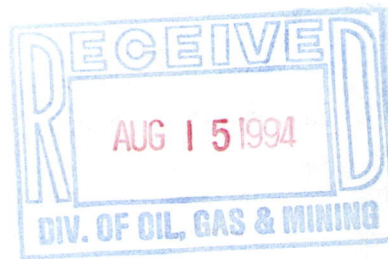
DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

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August 10, 1994

Mr. Glen Eurick
Environmental Affairs Coordinator
Barrick Mercur Gold Mine
P.O. Box 838
Tooele, Utah 84074

Re: Final Modified Permit No. UGW450002 and
Response to Permit Comments

Dear Mr. Eurick:

The public notice period for the above referenced permit expired and the only comments received were from Barrick. These comments were transmitted to us through your July 15, 1994 letter. We appreciate your thorough review and the corrections you suggested. Where significant changes to the permit have been suggested, we have either made the changes as you suggested or have responded to the suggested changes below. Changes not made, and for which no response is found below, were considered minor editorial changes that we did not believe were necessary or which were unnecessary changes to the general conditions that are contained in all Ground Water Permits issued by our Division. If you feel any important matters have not been covered, please contact us for further explanation.

In response to comment number 2, on Part III of the statement of basis contained within the Dames and Moore letter to you, the following explanation is offered. We note for the record, that you are not in agreement that the background concentration should be determined as the mean concentration of the background data. Please refer to U.A.C. R317-6-6.16.B.1.b where for purposes of compliance the "concentration of a pollutant must exceed the mean concentration for that pollutant by two standard deviations." Although you do not suggest an alternative basis for determining background in your letter, we can assume from previous correspondence that you would prefer to define background as the mean plus two standard deviations. Adjusting that number upwards by 25% for class II waters, and 10% for class I waters, would result in higher protection levels than making the same adjustment from the mean background concentration. This would allow greater degradation of ground water before the permittee would be non-compliant. The ambiguity of the ground water rule, before it was modified earlier this year, might have lead you to this expectation. However, it was never the intent of the rule that background for detectable parameters to be set as anything other than the mean.

For the purposes of the permit, background was defined by two separate statistical measures, the mean background concentration and standard deviation of the background concentrations. Because compliance is based on exceedence of both the protection level and the mean background concentration plus two standard deviations, it is appropriate to list both statistics in the permit.

We have noted your concern about the detection limit for thallium. The background concentration for thallium in the permit was established as non-detectable based on background data that did not indicate the presence of thallium at detection limits of 0.01 or 0.02 mg/l. The required detection limit, which is

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based on drinking water methodologies, is 0.001 mg/l. If future monitoring data indicates that the true background value for thallium is greater than 0.001 mg/l, the permit should be modified to reflect such new information. The reopener provision of the permit, Part IV.O.2, can be utilized to make this change if necessary. Please see the Statement of Basis Part III, for the addition of a statement reflecting our recognition of this issue. No change to the permit is believed to be necessary to accommodate this concern.

We have declined to make the suggested changes to Part I.D.2.b, since it would be the intent of our Division to give timely consideration to a Barrick request for variance under paragraph 4.

Your suggested change to 60 days from 30 days for the amount of time before Barrick would be required to submit accelerated monitoring results was not made because we believe a 30 day response time to be adequate. If a possible out-of-compliance situation exists, prompt attention and response to that situation is required for protection of ground water resources.

For your records, you will find enclosed a copy of the final executed permit. The permit modification retains the original expiration date, but, satisfies certain compliance schedule requirements and finalized permit protection levels. Please note the new monitoring and reporting requirements and those compliance schedule items set from the new permit issuance date. Finally, a permit modification fee of \$2500.00 at the rate of \$50.00 per hour has been assessed for the cost of administering this action. Please remit this amount to the Division of Water Quality within 30 days of receipt of this notice.

If you have any questions concerning this letter or your permit, please contact Dennis Frederick at 538-6146.

Sincerely,



Utah Water Quality Board

Don A. Ostler, P.E.
Executive Secretary

Enclosure

DAO:DAF:wfm

cc: Utah County Health Department
Tooele County Health Department
J.B.Brown, Dames and Moore
Wayne Hedberg, DOGM